



ITEM# 1951202
1/2" Air Ratchet Wrench
USER'S MANUAL



Read carefully and understand RULES FOR SAFE OPERATION and instructions before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

For technical questions and replacement parts, please call 1-800-222-5381. Thank you very much for choosing a NORTHERN TOOL + EQUIPMENT CO., Product! For future reference, please complete the owner's record below:

Model: _____ Purchase Date: _____

Save the receipt, warranty and these instructions. It is important that you read the entire instruction sheet to become familiar with this product before you begin using it. This product is designed for certain applications only. Northern Tool + Equipment strongly recommends that this product is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the product until you have first contacted Northern Tool + Equipment to determine if it can or should be performed on the product. Before using this product, please read the following instructions carefully.

Technical Specifications

Item	Description	Item	Description
Square Drive	1/2"	Air Inlet Diameter	1/4"- 18NPT
Free Speed	145 RPM	Min. Hose Size	3/8"
Max. Torque	65 ft-lbs	Max. air pressure	90 PSI
Air Consumption	4.5 CFM		

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep this manual and invoice in a safe and dry place for future reference.

WARNINGS AND SAFETY RULES

1. Wear proper clothing. Always use ANSI-approved safety impact goggles when assembling or using this tool. Wear long sleeved shirts, long pants and hard-toed shoes. Take off any loose fitting jewelry and keep long hair covered to prevent being caught in moving parts.
2. Keep work area clean and well lighted. A dim and/or cluttered work area invites personal injury.
3. Keep children and pets away from work areas. Children can be a distraction and should be supervised by an adult when near the work area. Never allow children to play with this product even if it is turned off.
4. Store idle tools properly. Keep this tool out of the reach of children.
5. Do not use the wrench if under the influence of alcohol or prescription drugs, or if you are tired. Doing so may cause damage to the tool, or personal injury. Do not use this or any tool if you are tired. Use common sense at all times.
6. Always use the proper tools. This tool was designed for a specific task. Do not alter this tool, or use it for a purpose for which it was not intended.
7. Be careful when connecting/disconnecting air supply. It is recommended to use quick disconnects (not included) rather than screw-on air connections.
8. Use compressed air only. Clean, dry, regulated compressed air at 90 PSI. Never use oxygen, carbon dioxide, combustible gases, or any other bottled gas as a power source for this tool.
9. Always disconnect air supply when this tool is not being used.

NOTE: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors that cannot be built into this product but must be supplied by the operator.

NOTE: READ ALL INSTRUCTIONS BEFORE USING THIS PRODUCT

ASSEMBLY

You Air Ratchet Wrench comes completely assembled. For information on parts, please refer to parts list & diagram on this manual.

Air Connection

1. Remove the plastic cap from the rear of the motor housing. The cap is attached to the connection head.
2. You will need a union fitting (not included) before you can connect your Air Ratchet Wrench to an air compressor. Attach the Union fitting to the motor housing. Tighten the fitting.
3. Attach an Air coupler (not included) to the union fitting if desired. This is a useful accessory as it allows quick-coupling action when using a variety of tools with the same air compressor. Your Air Ratchet Wrench is now ready for use.

SET UP

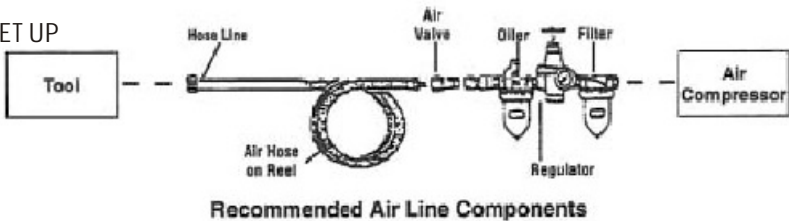


Fig. 1

NOTE: If you are not using an automatic oiler system, before operation, add a few drops of Pneumatic Tool Oil to the airline connection. Add a few drops more after hour of continual use.

OPERATION

1. Select the desired socket. Attach the socket to the Ratchet Anvil.
2. Set the compressor's pressure regulator to 90 PSI. Do not set the compressor's outlet regulator to over 90 PSI. Connect the compressor hose to the Air Ratchet wrench at the air inlet at the back of the tool. If any leaking is detected, disconnect the air hose and have it repaired prior to use.
3. You can check the direction of the drive by bypassing the Reverse Button (#39). To change the direction of the drive, turn towards R for reverse and F for forward. (Tighten or Loosen).
4. Place the socket over the nut to tighten or loosen. Grip the air ratchet firmly. Press the trigger to turn the nut. When tightening a nut, begin by threading the nut on as far as you can by hand.
5. When the nut is in place, tightened or removed, stop the Air Ratchet wrench by releasing the trigger. Remove the nut from the socket if needed. Turn off the compressor then remove the Air Ratchet wrench connection from the compressor.
6. When tightening: check the recommended torque specification for the nut. You should use a torque wrench to torque the nut after using the Air Ratchet Wrench.

⚠ WARNING! !

If the air ratchet wrench cannot loosen a nut, or if it stalls when tightening the nut, do not raise the outlet pressure of the air compressor. Do not continue attempts to loosen with the air ratchet wrench. Use appropriate tools and methods to loosen the nut.

MAINTENANCE

Your Air Ratchet Wrench is best operated with an airline oiler. If you are using this tool without an airline oiler, follow steps below:

1. Disconnect the Air Ratchet from the air hose.
2. Apply a few drops of Pneumatic Tool Oil through the air line before each use, or every hour if used continuously.
3. Apply a few drops of oil to the Roll Pin. Squeeze the trigger a few times to lubricate.

Diagram

Part No.	Description	Qty.	Part No.	Description	Qty.
1	Housing	1	27	Washer	1
2	Valve stem	1	28	Thread ring gear	1
3	Throttle level	1	29	Planet gear	3
4	O-ring	1	30	Gear shaft	3
5	Trigger pin	1	31	Gear plate	1
6	Air inlet	1	32	Clamp nut	1
7	Spring	1	33	Busing	1
8	Lock pin	1	34	Needle bear	1
9	O-ring	1	35	Crank shaft	1
10	Air regulator	1	36	Ratchet housing	1
11	O-ring	1	37	Drive busing	1
12	Inlet adaptor	1	38	Ratchet yoke	1
13	Valve spring	1	39	Reverse button	1
14	Throttle valve	1	40	Spring	2
15	Valve seat	1	41	Lock pin	2
16	Plastic grip	1	42	Washer	1
17	O-ring	1	43	Anvil	1
18	Exhaust deflector	1	44	Pin	2
19	Ball bearing	1	45	Ratchet pawl	2
20	Rear end plate	1	46	Thrust washer	1
21	Dowel pin	1	47	Retainer ring	1
22	Rotor blade	2	48	Spring	1
23	Rotor	4	49	Steel ball	1
24	Cylinder	1	50	Spring	2
25	Front end plate	1	51	Steel ball	2
26	Ball bearing	1			

